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**CLAIMS**

[Claim(s)]

[Claim 1]A slot machine which changes two or more patterns of a pattern display for indication by an injection of a game medium to an entrance slot, and operation of a game start switch, and is made to suspend change of each pattern by predetermined stopping timing, comprising:

A liquid crystal operator display arranged at a front face of each pattern.

A front display control means on which said liquid crystal operator display is made to display a predetermined display.

Composition as which said two or more pattern displays for indication display two or more said patterns simultaneously, respectively.

From an identification part of truth of said game medium thrown into said entrance slot, and two or more predetermined combination depended on a pattern arranged by linear shape among each pattern. A prize one-stepped bracket complex doubling setting-out means to set up predetermined prize one-stepped bracket complex doubling according to the number of said game medium identified by said identification part as it is genuine, When it judges that a \*\*\*\* decision means which judges whether combination of each pattern after suspending change is in agreement with said prize one-stepped bracket complex doubling [ which was set up by said prize one-stepped bracket complex doubling setting-out means ], and said \*\*\*\* decision means are in agreement with said prize one-stepped bracket complex doubling, Have a \*\*\*\* means to perform \*\*\*\* and said front display control means, Composition which does not display said line display on said liquid crystal operator display in the state where display a line display in alignment with arrangement of each pattern of said prize one-stepped bracket complex doubling [ which was set up by said prize one-stepped bracket complex doubling setting-out means ] on said liquid crystal operator display, and said game medium is not thrown in when said game medium is thrown in.

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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Industrial Application]This invention relates to the slot machine which changes the pattern of two or more pattern displays for indication by an injection of the game medium to an entrance slot, and operation of a game start switch, and is made to suspend change of each pattern by predetermined stopping timing.

[0002]

[Description of the Prior Art]As this conventional kind of a slot machine, there are some which are shown in JP,54-130590,U, for example. That is, after throwing game media, such as a medal and coin, into an entrance slot, three drums which displayed the pattern are rotated, the button of a safety switch is pushed one by one, rotation of a drum is suspended, and the game medium of a predetermined number is \*\*\*\*(ed) according to the combination of each display after a stop.

[0003]In this conventional slot machine, the number of the combination used as prize one-stepped bracket complex doubling differs according to the injection number of sheets of a game medium, and prize one-stepped bracket complex doubling. For example, when one game medium is thrown in. When it is the combination to which a pattern of the same kind is equal in the middle of three drums at a horizontal single tier and two game media are thrown in, It is the combination to which a pattern of the same kind is equal to a horizontal single tier in the upper row of three drums, the middle, or the lower berth, and when three game media are thrown in, the pattern of the same kind to a horizontal single tier serves as combination to which a pattern is equal at a slanting single tier in the upper row of three drums, the middle, or the lower berth. In order to show the upper row, the middle, the lower berth, and each slanting arrangement used as these prize one-stepped bracket complex doubling, the line in alignment with each arrangement is drawn near the drum of transverse-plane glass fixed.

[0004]

[Problem to be solved by the invention]However, in the conventional slot machine, when prize one-stepped bracket complex doubling gathered, since it was changeless, the problem that the interest of a game was missing was among the others to which \*\*\*\* of a game medium is performed.

[0005]Since the line which shows prize one-stepped bracket complex doubling irrespective of the injection number of sheets of a game medium in the conventional slot machine is fixed, If it was hard to grasp the arrangement used as prize one-stepped bracket complex doubling, and the interest of the game was missing and liquid crystal display of said line was only carried out from before a game start, there was a problem that it was deficient in change and the interest of a game was missing also from this point.

[0006]This invention was made that this problem should be solved and can display a display predetermined [ , such as a line display in alignment with a \*\*\*\* display or the arrangement of prize one-stepped bracket complex doubling. ], When a game medium is thrown in, as a line display is

carried out according to the number of media, it is varied, and aims at providing the slot machine which the interest of the game increased.

[0007]

[Means for solving problem] In order to solve this purpose, the place made into the summary of this invention, In the slot machine which changes two or more patterns of a pattern display for indication by an injection of the game medium to an entrance slot, and operation of a game start switch, and is made to suspend change of each pattern by predetermined stopping timing, The liquid crystal operator display arranged at the front face of each pattern, and the front display control means on which said liquid crystal operator display is made to display a predetermined display, The composition as which said two or more pattern displays for indication display two or more said patterns simultaneously, respectively, From the identification part of the truth of said game medium thrown into said entrance slot, and two or more predetermined combination depended on the pattern arranged by linear shape among each pattern. A prize one-stepped bracket complex doubling setting-out means to set up predetermined prize one-stepped bracket complex doubling according to the number of said game medium identified by said identification part as it is genuine, When it judges that the \*\*\*\* decision means which judges whether the combination of each pattern after suspending change is in agreement with said prize one-stepped bracket complex doubling [ which was set up by said prize one-stepped bracket complex doubling setting-out means ], and said \*\*\*\* decision means are in agreement with said prize one-stepped bracket complex doubling, Have a \*\*\*\* means to perform \*\*\*\*, and said front display control means displays the line display in alignment with the arrangement of each pattern of said prize one-stepped bracket complex doubling [ which was set up by said prize one-stepped bracket complex doubling setting-out means ] on said liquid crystal operator display, when said game medium is thrown in, And in the state where said game medium is not thrown in, it consists in the slot machine having the composition which does not display said line display on said liquid crystal operator display.

[0008]

[Function] In the front face of the pattern of a pattern display for indication, by a front display control means, a liquid crystal operator display changes by the shaded state and a transmission state selectively, and performs a predetermined display.

[0009] When a display control means displays a \*\*\*\* display on a liquid crystal operator display, or in having a sound or a vibration generating means, it is rich in the change in the case of \*\*\*\*.

[0010] When a display control means displays the line display in alignment with the arrangement of each pattern of prize one-stepped bracket complex doubling, it is easy to grasp the arrangement used as prize one-stepped bracket complex doubling.

[0011] In the state where a game medium is not thrown in, when a game medium is thrown in, the line display in alignment with the arrangement of each pattern of prize one-stepped bracket complex doubling [ which was set up by the prize one-stepped bracket complex doubling setting-out means ] is displayed on a liquid crystal operator display, without displaying the line display on the liquid crystal operator display. Thereby, a line can shine and the excitability by throwing in a game medium can be increased.

[0012]

[Working example] Hereafter, one embodiment of this invention is described based on Drawings.

Drawing 1 - drawing 4 show one embodiment of this invention. As shown in drawing 2, the slot machine 10 is installing the three liquid crystal pattern displays for indication 20a, 20b, and 20c longwise at the front 11a of the box 11 in a transverse direction side by side. The liquid crystal pattern displays for indication 20a, 20b, and 20c shine brightly with a back light, and the pattern 24 displayed is made visible [ displays for indication ].

[0013] The liquid crystal operator display 40 is formed in the transverse plane 11a of a front face of the liquid crystal pattern displays for indication 20a, 20b, and 20c. The liquid crystal operator display 40 is arranged at a front face of each pattern 24, and using liquid crystal glass, although it is usually

in a light transmission state, it displays by changing with energization to a shaded state selectively. Corresponding to each, the three stopping operation switches 25a, 25b, and 25c are formed in a lower part of the liquid crystal pattern displays for indication 20a, 20b, and 20c. The stopping operation switches 25a, 25b, and 25c are the earth switches for choosing stopping timing of change of the pattern 24 of the liquid crystal pattern displays for indication 20a, 20b, and 20c. The entrance slot 12 and the game start switch 13 of a medal used as a game medium are formed in the transverse plane 11a. The identification part 14 which identifies truth of a medal thrown into the entrance slot 12 is formed in an inside of the slot machine 10.

[0014]The control device 30 shown in drawing 3 is formed in an inside of the slot machine 10. In the control device 30, the pattern display control means 31, the prize one-stepped bracket complex doubling setting-out means 32, the \*\*\*\* decision means 33, and the front display control means 34 are formed. When the pattern display control means 31 identifies Shinsei of a medal in which the identification part 14 was supplied, according to operation of the game start switch 14, the three liquid crystal pattern displays for indication 20a, 20b, and 20c are alike, respectively — a lengthwise direction — two or more kinds of patterns 24, such as a picture, a sign, a number, and a character, — a top — or it is made to change and is made to display so that it may slide caudad. The pattern display control means 31 is predetermined stopping timing, i.e., stopping timing with selected operation of the three stopping operation switches 25a, 25b, and 25c. Change of the pattern 24 of a liquid crystal pattern display for indication corresponding among the three liquid crystal pattern displays for indication 20a, 20b, and 20c is suspended.

[0015]The prize one-stepped bracket complex doubling setting-out means 32 sets up prize one-stepped bracket complex doubling according to the number of a medal identified by the identification part 14 as it is genuine from two or more predetermined combination depended on the pattern 24 arranged on a straight line among each pattern 24. It is judged whether combination of the \*\*\*\* decision means 33 of each pattern 24 after suspending change of the liquid crystal pattern displays for indication 20a, 20b, and 20c corresponds with predetermined prize one-stepped bracket complex doubling, double [ i.e., / to which it was set by the prize one-stepped bracket complex doubling setting-out means 32 / prize one-stepped bracket complex ].

[0016]The front display control means 34 displays on a front face of each pattern 24 the line displays 35a–35e in alignment with arrangement of each pattern 24 of prize one-stepped bracket complex doubling [ which was set as the liquid crystal operator display 40 by the prize one-stepped bracket complex doubling setting-out means 32 ]. When it judges that the \*\*\*\* decision means 33 of the front display control means 34 corresponds with prize one-stepped bracket complex doubling, a predetermined \*\*\*\* display is displayed on the liquid crystal operator display 40. A blink display of the line displays 35a–35e in alignment with arrangement of each pattern 24 judged that the \*\*\*\* decision means 33 is in agreement with prize one-stepped bracket complex doubling as a predetermined \*\*\*\* display, Frame display 36 grade which the \*\*\*\* decision means 33 of the liquid crystal operator display 40 surrounds a position corresponding to each pattern 24 judged to be prize one-stepped bracket complex doubling, and blinks is displayed.

[0017]Prize one-stepped bracket complex doubling and the line displays 35a–35e corresponding to it to the state where a medal shown in drawing 4 (A) is not thrown in, For example, when the number of a medal identified by the identification part 14 is one piece, as the line display 35a shows to drawing 4 (B), it is the combination to which the three \*\*\*\* patterns 24, for example, "7", are located in a line just beside in each middle with the three liquid crystal pattern displays for indication 20a, 20b, and 20c. When the number of a medal is two pieces, as the line displays 35a–35c show to drawing 4 (C), it is the combination to which the three \*\*\*\* patterns 24 are located in a line just beside in each upper row, the middle, or the lower berth with the three liquid crystal pattern displays for indication 20a, 20b, and 20c. When the number of a medal is three pieces, as the line displays 35a–35e show to drawing 4 (D), The three liquid crystal pattern displays for indication 20a, 20b, and 20c, each upper row, The three \*\*\*\* patterns 24 in either the middle or the lower

berth in combination located in a line just beside. In combination aslant located in a line, the three patterns 24 of the same kind on the lower berth of the left-hand side liquid crystal pattern display for indication 20a, the middle of the central liquid crystal pattern display for indication 20b, and the upper row of the right-hand side liquid crystal pattern display for indication 20c. Or the three \*\*\*\* patterns 24 are one combination of the combination aslant located in a line in the upper row of the left-hand side liquid crystal pattern display for indication 20a, the middle of the central liquid crystal pattern display for indication 20b, and the lower berth of the right-hand side liquid crystal pattern display for indication 20c.

[0018]The sound generating means 37 is formed in an inside of the box 11. A sound which tells that the sound generating means 37 had \*\*\*\* according to judgment of the \*\*\*\* decision means 33 is generated. The \*\*\*\* means 38 is formed in the box 11. When it judges that the \*\*\*\* decision means 33 of the \*\*\*\* means 38 corresponds with prize one-stepped bracket complex doubling, two or more medals are discharged as a prize in \*\*\*\*\* 39 provided in the lower part of the box 11.

[0019]The control device 30 a function of the pattern display control means 31, the prize one-stepped bracket complex doubling setting-out means 32, the \*\*\*\* decision means 33, and the front display control means 34 A programmable microcomputer. Or it can realize, using a thing equivalent to this suitably, a microcomputer realizes, then a central processing unit, read-only memory, random access memory, an interface, etc. are arranged and constituted.

[0020]Next, an operation is explained. When performing a game, a medal of the number according to prize one-stepped bracket complex doubling [ which it is going to set it as the entrance slot 12 ] is thrown in first. Namely, as shown in (B) of drawing 4, in setting up one prize one-stepped bracket complex doubling. One medal is thrown in, as shown in (C) of drawing 4, in setting up three prize one-stepped bracket complex doubling, it throws in two medals, and as shown in (D) of drawing 4, in setting up five prize one-stepped bracket complex doubling, it throws in three medals.

[0021]If the thrown-in medal is identified by the identification part 14 as it is genuine, while prize one-stepped bracket complex doubling will be set up according to the identified number by the prize one-stepped bracket complex doubling setting-out means 32, As the front display control means 34 shows to drawing 1 (A) according to the supplied number, the line displays 35a-35e are displayed on the liquid crystal operator display 40. Although the liquid crystal operator display 40 is usually in a light transmission state and each pattern 24 of the liquid crystal pattern displays for indication 20a, 20b, and 20c is shown as the transverse-plane side, When a display is performed by the front display control means 34, in the front face of each pattern 24, the portion into which a display is performed changes with energization to a shaded state, and a predetermined display is performed. These line displays 35a-35e are displayed corresponding to the thick line shown by (B) of drawing 4, (C), and (D). Since it becomes easy to grasp the arrangement used as prize one-stepped bracket complex doubling by the line displays 35a-35e, the interest of a game is increased. In the state where a medal is not thrown in, the line displays 35a-35e are not displayed on the liquid crystal operator display 40. Next, if the game start switch 13 is pushed and operated, it will change and the pattern 24 displayed on the three liquid crystal pattern displays for indication 20a, 20b, and 20c will be displayed by the pattern display control means 31 so that it may slide upwards from under the bottom from a top one after another by two or more kinds of patterns.

[0022]If the stopping operation switches 25a, 25b, and 25c are pushed at this time, change of the pattern 24 of the corresponding liquid crystal pattern displays for indication 20a, 20b, and 20c will stop by the stopping timing according to that operation. The stopped pattern 24 Either of prize one-stepped bracket complex doubling. Or when in agreement with all (i.e., when it laps with either of the line displays 35a-35e displayed on the liquid crystal operator display 40 and the \*\*\*\* pattern 24 is displayed), the \*\*\*\* means 38 \*\*\*\* a medal to \*\*\*\*\* 39 by the \*\*\*\* decision means 33.

[0023]The sound which tells that the sound generating means 37 \*\*\*\*(ed) simultaneously with \*\*\*\* is emitted, and a \*\*\*\* display is displayed on the liquid crystal operator display 40 by the front display control means 34. Thus, since it is rich in the change in the case of \*\*\*\*, the interest of a

game is increased. As a \*\*\*\* display, the blink display of the line displays 35a-35e in alignment with the arrangement of each pattern 24 which was in agreement with prize one-stepped bracket complex doubling, and the frame display 36 which surrounds the position corresponding to each pattern 24, and blinks are displayed on the liquid crystal operator display 40. Or these may be combined suitably. A speculative spirit can be instigated while this tells in which arrangement prize one-stepped bracket complex doubling was displayed. When the stopped pattern 24 is not in agreement with prize one-stepped bracket complex doubling, neither \*\*\*\*, nor a \*\*\*\* display and generating of a sound is performed.

[0024]The liquid crystal pattern displays for indication 20a, 20b, and 20c can make depth thin compared with the case where the drum 3 is used, without changing the number and the size of the pattern 24, and, for this reason, can make thin depth of slot machine 10 the very thing. Although what has three liquid crystal pattern displays for indication was explained, it may not restrict to three pieces and they may be what kind of the two or more number.

[0025]Although the liquid crystal pattern display for indication which displays with liquid crystal glass is used as a pattern display for indication in this example instead, what displays on the drum which gives a pattern to the usual circumference and rotates to it may be used. Stopping timing is chosen according to operation of a stopping operation switch, and also it may be automatically chosen by progress of fixed time after change of a display of a pattern.

[0026]In the state where a medal is not thrown in, all the line displays which can be displayed may be displayed, or it may leave the line display displayed in the last game to instead of [ which does not display a line display on a liquid crystal operator display ] as it is, and it may be displayed on it. The sound which a sound generating means emits may be voice which forms language. A sound generating means may emit the sound which tells that, when \*\*\*\* besides when \*\*\*\* is performed is not performed. It may be made to increase force when \*\*\*\* is performed by establishing a vibration generating means with the sound generating means instead of a sound generating means. [0027]

[Effect of the Invention]According to the slot machine concerning this invention, a liquid crystal operator display in the front face of a pattern. If a display predetermined [ such as a line display in alignment with a \*\*\*\* display or the arrangement of prize one-stepped bracket complex doubling, ] can be displayed and a liquid crystal operator display displays a \*\*\*\* display, It is rich in the change in the case of \*\*\*\*, and since it will be easy to grasp the arrangement used as prize one-stepped bracket complex doubling if the line display to which the liquid crystal operator display met the arrangement of each pattern of prize one-stepped bracket complex doubling is displayed, the interest of a game is increased. In the state where a game medium is not thrown in. Since the line display in alignment with the arrangement of each pattern of prize one-stepped bracket complex doubling [ which was set up by the prize one-stepped bracket complex doubling setting-out means ] was displayed on the liquid crystal operator display when a game medium was thrown in without displaying the line display on the liquid crystal operator display, A line can shine and the speculative spirit to the increase of excitability by throwing in a game medium and a game can be instigated.

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**TECHNICAL FIELD**

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[Industrial Application]This invention relates to the slot machine which changes the pattern of two or more pattern displays for indication by an injection of the game medium to an entrance slot, and operation of a game start switch, and is made to suspend change of each pattern by predetermined stopping timing.

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**PRIOR ART**

[Description of the Prior Art]As this conventional kind of a slot machine, there are some which are shown in JP,54-130590,U, for example. That is, after throwing game media, such as a medal and coin, into an entrance slot, three drums which displayed the pattern are rotated, the button of a safety switch is pushed one by one, rotation of a drum is suspended, and the game medium of a predetermined number is \*\*\*(ed) according to the combination of each display after a stop. [0003]In this conventional slot machine, the number of the combination used as prize one-stepped bracket complex doubling differs according to the injection number of sheets of a game medium, and prize one-stepped bracket complex doubling. For example, when one game medium is thrown in. When it is the combination to which a pattern of the same kind is equal in the middle of three drums at a horizontal single tier and two game media are thrown in, It is the combination to which a pattern of the same kind is equal to a horizontal single tier in the upper row of three drums, the middle, or the lower berth, and when three game media are thrown in, the pattern of the same kind to a horizontal single tier serves as combination to which a pattern is equal at a slanting single tier in the upper row of three drums, the middle, or the lower berth. In order to show the upper row, the middle, the lower berth, and each slanting arrangement used as these prize one-stepped bracket complex doubling, the line in alignment with each arrangement is drawn near the drum of transverse-plane glass fixed.

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## EFFECT OF THE INVENTION

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[Effect of the Invention]According to the slot machine concerning this invention, a liquid crystal operator display in the front face of a pattern. If a display predetermined [ such as a line display in alignment with a \*\*\*\* display or the arrangement of prize one-stepped bracket complex doubling, ] can be displayed and a liquid crystal operator display displays a \*\*\*\* display, It is rich in the change in the case of \*\*\*\*, and since it will be easy to grasp the arrangement used as prize one-stepped bracket complex doubling if the line display to which the liquid crystal operator display met the arrangement of each pattern of prize one-stepped bracket complex doubling is displayed, the interest of a game is increased. In the state where a game medium is not thrown in. Since the line display in alignment with the arrangement of each pattern of prize one-stepped bracket complex doubling [ which was set up by the prize one-stepped bracket complex doubling setting-out means ] was displayed on the liquid crystal operator display when a game medium was thrown in without displaying the line display on the liquid crystal operator display, A line can shine and the speculative spirit to the increase of excitability by throwing in a game medium and a game can be instigated.

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## TECHNICAL PROBLEM

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[Problem to be solved by the invention]However, in the conventional slot machine, when prize one-stepped bracket complex doubling gathered, since it was changeless, the problem that the interest of a game was missing was among the others to which \*\*\* of a game medium is performed.

[0005]Since the line which shows prize one-stepped bracket complex doubling irrespective of the injection number of sheets of a game medium in the conventional slot machine is fixed, If it was hard to grasp the arrangement used as prize one-stepped bracket complex doubling, and the interest of the game was missing and liquid crystal display of said line was only carried out from before a game start, there was a problem that it was deficient in change and the interest of a game was missing also from this point.

[0006]This invention was made that this problem should be solved and can display a display predetermined [, such as a line display in alignment with a \*\*\* display or the arrangement of prize one-stepped bracket complex doubling, ], When a game medium is thrown in, as a line display is carried out according to the number of media, it is varied, and aims at providing the slot machine which the interest of the game increased.

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**MEANS**

[Means for solving problem]In order to solve this purpose, a place made into a summary of this invention, In a slot machine which changes two or more patterns of a pattern display for indication by an injection of a game medium to an entrance slot, and operation of a game start switch, and is made to suspend change of each pattern by predetermined stopping timing, A liquid crystal operator display arranged at a front face of each pattern, and a front display control means on which said liquid crystal operator display is made to display a predetermined display, Composition as which said two or more pattern displays for indication display two or more said patterns simultaneously, respectively, From an identification part of truth of said game medium thrown into said entrance slot, and two or more predetermined combination depended on a pattern arranged by linear shape among each pattern. A prize one-stepped bracket complex doubling setting-out means to set up predetermined prize one-stepped bracket complex doubling according to the number of said game medium identified by said identification part as it is genuine, When it judges that a \*\*\*\* decision means which judges whether combination of each pattern after suspending change is in agreement with said prize one-stepped bracket complex doubling [ which was set up by said prize one-stepped bracket complex doubling setting-out means ], and said \*\*\*\* decision means are in agreement with said prize one-stepped bracket complex doubling, Have a \*\*\*\* means to perform \*\*\*\*, and said front display control means displays a line display in alignment with arrangement of each pattern of said prize one-stepped bracket complex doubling [ which was set up by said prize one-stepped bracket complex doubling setting-out means ] on said liquid crystal operator display, when said game medium is thrown in, And in the state where said game medium is not thrown in, it consists in a slot machine having the composition which does not display said line display on said liquid crystal operator display.

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## OPERATION

[Function]In the front face of the pattern of a pattern display for indication, by a front display control means, a liquid crystal operator display changes by the shaded state and a transmission state selectively, and performs a predetermined display.

[0009]When a display control means displays a \*\*\* display on a liquid crystal operator display, or in having a sound or a vibration generating means, it is rich in the change in the case of \*\*\*.

[0010]When a display control means displays the line display in alignment with the arrangement of each pattern of prize one-stepped bracket complex doubling, it is easy to grasp the arrangement used as prize one-stepped bracket complex doubling.

[0011]In the state where a game medium is not thrown in, when a game medium is thrown in, the line display in alignment with the arrangement of each pattern of prize one-stepped bracket complex doubling [ which was set up by the prize one-stepped bracket complex doubling setting-out means ] is displayed on a liquid crystal operator display, without displaying the line display on the liquid crystal operator display. Thereby, a line can shine and the excitability by throwing in a game medium can be increased.

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**EXAMPLE**

[Working example] Hereafter, one embodiment of this invention is described based on Drawings. Drawing 1 – drawing 4 show one embodiment of this invention. As shown in drawing 2, the slot machine 10 is installing the three liquid crystal pattern displays for indication 20a, 20b, and 20c longwise at the front 11a of the box 11 in a transverse direction side by side. The liquid crystal pattern displays for indication 20a, 20b, and 20c shine brightly with a back light, and the pattern 24 displayed is made visible [ displays for indication ].

[0013] The liquid crystal operator display 40 is formed in the transverse plane 11a of the front face of the liquid crystal pattern displays for indication 20a, 20b, and 20c. The liquid crystal operator display 40 is arranged at the front face of each pattern 24, and using liquid crystal glass, although it is usually in a light transmission state, it displays by changing with energization to a shaded state selectively. Corresponding to each, the three stopping operation switches 25a, 25b, and 25c are formed in the lower part of the liquid crystal pattern displays for indication 20a, 20b, and 20c. The stopping operation switches 25a, 25b, and 25c are the earth switches for choosing the stopping timing of change of the pattern 24 of the liquid crystal pattern displays for indication 20a, 20b, and 20c. The entrance slot 12 and the game start switch 13 of the medal used as a game medium are formed in the transverse plane 11a. The identification part 14 which identifies the truth of the medal thrown into the entrance slot 12 is formed in the inside of the slot machine 10.

[0014] The control device 30 shown in drawing 3 is formed in the inside of the slot machine 10. In the control device 30, the pattern display control means 31, the prize one-stepped bracket complex doubling setting-out means 32, the \*\*\* decision means 33, and the front display control means 34 are formed. When the pattern display control means 31 identifies Shinsei of the medal in which the identification part 14 was supplied, according to operation of the game start switch 14, the three liquid crystal pattern displays for indication 20a, 20b, and 20c are alike, respectively — a lengthwise direction — two or more kinds of patterns 24, such as a picture, a sign, a number, and a character, — a top — or it is made to change and is made to display so that it may slide caudad. The pattern display control means 31 is predetermined stopping timing, i.e., stopping timing with selected operation of the three stopping operation switches 25a, 25b, and 25c. Change of the pattern 24 of a liquid crystal pattern display for indication corresponding among the three liquid crystal pattern displays for indication 20a, 20b, and 20c is suspended.

[0015] The prize one-stepped bracket complex doubling setting-out means 32 sets up prize one-stepped bracket complex doubling according to the number of the medal identified by the identification part 14 as it is genuine from two or more predetermined combination depended on the pattern 24 arranged on a straight line among each pattern 24. It is judged whether the combination of the \*\*\* decision means 33 of each pattern 24 after suspending change of the liquid crystal pattern displays for indication 20a, 20b, and 20c corresponds with predetermined prize one-stepped bracket complex doubling, double [ i.e., / to which it was set by the prize one-stepped bracket complex doubling setting-out means 32 / prize one-stepped bracket complex ].

[0016]The front display control means 34 displays on a front face of each pattern 24 the line displays 35a-35e in alignment with arrangement of each pattern 24 of prize one-stepped bracket complex doubling [ which was set as the liquid crystal operator display 40 by the prize one-stepped bracket complex doubling setting-out means 32 ]. When it judges that the \*\*\*\* decision means 33 of the front display control means 34 corresponds with prize one-stepped bracket complex doubling, a predetermined \*\*\*\* display is displayed on the liquid crystal operator display 40. A blink display of the line displays 35a-35e in alignment with arrangement of each pattern 24 judged that the \*\*\*\* decision means 33 is in agreement with prize one-stepped bracket complex doubling as a predetermined \*\*\*\* display, Frame display 36 grade which the \*\*\*\* decision means 33 of the liquid crystal operator display 40 surrounds a position corresponding to each pattern 24 judged to be prize one-stepped bracket complex doubling, and blinks is displayed.

[0017]Prize one-stepped bracket complex doubling and the line displays 35a-35e corresponding to it to the state where a medal shown in drawing 4 (A) is not thrown in, For example, when the number of a medal identified by the identification part 14 is one piece, as the line display 35a shows to drawing 4 (B), it is the combination to which the three \*\*\*\* patterns 24, for example, "7", are located in a line just beside in each middle with the three liquid crystal pattern displays for indication 20a, 20b, and 20c. When the number of a medal is two pieces, as the line displays 35a-35e show to drawing 4 (C), it is the combination to which the three \*\*\*\* patterns 24 are located in a line just beside in each upper row, the middle, or the lower berth with the three liquid crystal pattern displays for indication 20a, 20b, and 20c. When the number of a medal is three pieces, as the line displays 35a-35e show to drawing 4 (D), With the three liquid crystal pattern displays for indication 20a, 20b, and 20c, each upper row, The three \*\*\*\* patterns 24 in either the middle or the lower berth in combination located in a line just beside. In combination aslant located in a line, the three patterns 24 of the same kind on the lower berth of the left-hand side liquid crystal pattern display for indication 20a, the middle of the central liquid crystal pattern display for indication 20b, and the upper row of the right-hand side liquid crystal pattern display for indication 20c. Or the three \*\*\*\* patterns 24 are one combination of the combination aslant located in a line in the upper row of the left-hand side liquid crystal pattern display for indication 20a, the middle of the central liquid crystal pattern display for indication 20b, and the lower berth of the right-hand side liquid crystal pattern display for indication 20c.

[0018]The sound generating means 37 is formed in the inside of the box 11. The sound which tells that the sound generating means 37 had \*\*\*\* according to judgment of the \*\*\*\* decision means 33 is generated. The \*\*\*\* means 38 is formed in the box 11. When it judges that the \*\*\*\* decision means 33 of the \*\*\*\* means 38 corresponds with prize one-stepped bracket complex doubling, two or more medals are discharged as a prize in \*\*\*\*\* 39 provided in the lower part of the box 11.

[0019]The control device 30 the function of the pattern display control means 31, the prize one-stepped bracket complex doubling setting-out means 32, the \*\*\*\* decision means 33, and the front display control means 34 A programmable microcomputer, Or it can realize, using a thing equivalent to this suitably, a microcomputer realizes, then a central processing unit, read-only memory, random access memory, an interface, etc. are arranged and constituted.

[0020]Next, an operation is explained. When performing a game, the medal of the number according to prize one-stepped bracket complex doubling [ which it is going to set it as the entrance slot 12 ] is thrown in first. Namely, as shown in (B) of drawing 4, in setting up one prize one-stepped bracket complex doubling. One medal is thrown in, as shown in (C) of drawing 4, in setting up three prize one-stepped bracket complex doubling, it throws in two medals, and as shown in (D) of drawing 4, in setting up five prize one-stepped bracket complex doubling, it throws in three medals.

[0021]If the thrown-in medal is identified by the identification part 14 as it is genuine, while prize one-stepped bracket complex doubling will be set up according to the identified number by the prize one-stepped bracket complex doubling setting-out means 32, As the front display control means 34 shows to drawing 1 (A) according to the supplied number, the line displays 35a-35e are displayed on

the liquid crystal operator display 40. Although the liquid crystal operator display 40 is usually in a light transmission state and each pattern 24 of the liquid crystal pattern displays for indication 20a, 20b, and 20c is shown as the transverse-plane side. When a display is performed by the front display control means 34, in the front face of each pattern 24, the portion into which a display is performed changes with energization to a shaded state, and a predetermined display is performed. These line displays 35a-35e are displayed corresponding to the thick line shown by (B) of drawing 4, (C), and (D). Since it becomes easy to grasp the arrangement used as prize one-stepped bracket complex doubling by the line displays 35a-35e, the interest of a game is increased. In the state where a medal is not thrown in, the line displays 35a-35e are not displayed on the liquid crystal operator display 40. Next, if the game start switch 13 is pushed and operated, it will change and the pattern 24 displayed on the three liquid crystal pattern displays for indication 20a, 20b, and 20c will be displayed by the pattern display control means 31 so that it may slide upwards from under the bottom from a top one after another by two or more kinds of patterns.

[0022]If the stopping operation switches 25a, 25b, and 25c are pushed at this time, change of the pattern 24 of the corresponding liquid crystal pattern displays for indication 20a, 20b, and 20c will stop by the stopping timing according to that operation. The stopped pattern 24 Either of prize one-stepped bracket complex doubling. Or when in agreement with all (i.e., when it laps with either of the line displays 35a-35e displayed on the liquid crystal operator display 40 and the \*\*\*\* pattern 24 is displayed), the \*\*\*\* means 38 \*\*\*\* a medal to \*\*\*\*\* 39 by the \*\*\*\* decision means 33.

[0023]The sound which tells that the sound generating means 37 \*\*\*\*(ed) simultaneously with \*\*\*\* is emitted, and a \*\*\*\* display is displayed on the liquid crystal operator display 40 by the front display control means 34. Thus, since it is rich in the change in the case of \*\*\*\*, the interest of a game is increased. As a \*\*\*\* display, the blink display of the line displays 35a-35e in alignment with the arrangement of each pattern 24 which was in agreement with prize one-stepped bracket complex doubling, and the frame display 36 which surrounds the position corresponding to each pattern 24, and blinks are displayed on the liquid crystal operator display 40. Or these may be combined suitably. A speculative spirit can be instigated while this tells in which arrangement prize one-stepped bracket complex doubling was displayed. When the stopped pattern 24 is not in agreement with prize one-stepped bracket complex doubling, neither \*\*\*\*, nor a \*\*\*\* display and generating of a sound is performed.

[0024]The liquid crystal pattern displays for indication 20a, 20b, and 20c can make depth thin compared with the case where the drum 3 is used, without changing the number and the size of the pattern 24, and, for this reason, can make thin depth of slot machine 10 the very thing. Although what has three liquid crystal pattern displays for indication was explained, it may not restrict to three pieces and they may be what kind of the two or more number.

[0025]Although the liquid crystal pattern display for indication which displays with liquid crystal glass is used as a pattern display for indication in this example instead, what displays on the drum which gives a pattern to the usual circumference and rotates to it may be used. Stopping timing is chosen according to operation of a stopping operation switch, and also it may be automatically chosen by progress of fixed time after change of a display of a pattern.

[0026]In the state where a medal is not thrown in, all the line displays which can be displayed may be displayed, or it may leave the line display displayed in the last game to instead of [ which does not display a line display on a liquid crystal operator display ] as it is, and it may be displayed on it. The sound which a sound generating means emits may be voice which forms language. A sound generating means may emit the sound which tells that, when \*\*\*\* besides when \*\*\*\* is performed is not performed. It may be made to increase force when \*\*\*\* is performed by establishing a vibration generating means with the sound generating means instead of a sound generating means.

[Translation done.]

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## DESCRIPTION OF DRAWINGS

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### [Brief Description of the Drawings]

[Drawing 1] It is an outline front view of the liquid crystal pattern display for indication which displayed the \*\*\* display of the slot machine of one embodiment of this invention.

[Drawing 2] It is a front view of a slot machine.

[Drawing 3] It is a block diagram showing the function of a slot machine.

[Drawing 4] It is an outline front view of a liquid crystal pattern display for indication showing prize one-stepped bracket complex doubling.

### [Explanations of letters or numerals]

10 [ — Game start switch, ] — A slot machine, 11 — A box, 12 — An entrance slot, 13 14 — An identification part, 20a, 20b, 20c — A liquid crystal pattern display for indication, 24 — Pattern, 25a, 25b, 25c — A stopping operation switch, 30 — A control device, 31 — Pattern display control means, 32 [ — A line display, 36 / — A frame display, 37 / — A sound generating means, 38 / — A \*\*\* means, 39 / — \*\*\*\*\*, 40 / — Liquid crystal operator display. ] — A prize one-stepped bracket complex doubling setting-out means, 33 — A \*\*\* decision means, 34 — A front display control means, 35a-35e

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[Translation done.]

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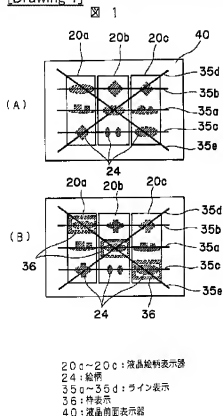
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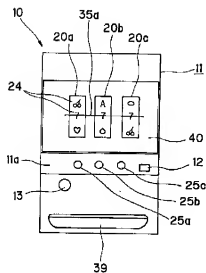
## DRAWINGS

[Drawing 1]



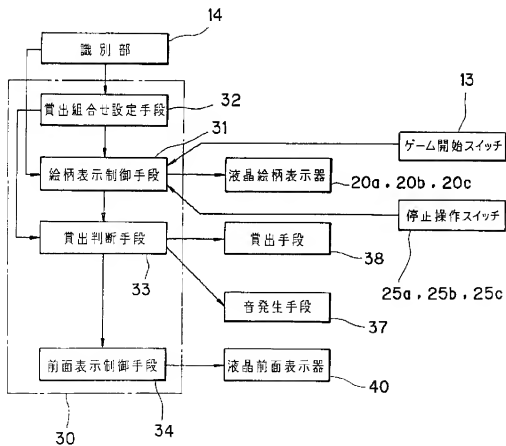
[Drawing 2]

図 2



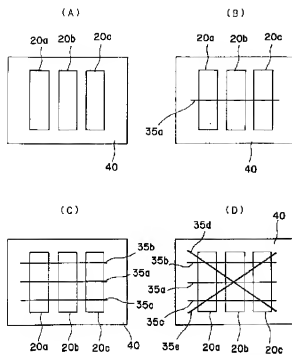
[Drawing 3]

図 3



[Drawing 4]

図 4



[Translation done.]

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**CORRECTION OR AMENDMENT**


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[Kind of official gazette]Printing of amendment by regulation of Patent Law Article 17 of 2

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[Amendment 1]

[Document to be Amended]Description

[Item(s) to be Amended]0024

[Method of Amendment]Change

[Proposed Amendment]

[0024]The liquid crystal pattern displays for indication 20a, 20b, and 20c can make depth thin compared with the case where the drum 3 is used, without changing the number and the size of the pattern 24, and, for this reason, can make thin depth of slot machine 10 the very thing. Although what has three liquid crystal pattern displays for indication was explained, it does not restrict to three pieces.

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審査請求 未請求 請求項の数1(全 7 頁)

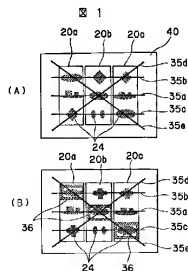
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## (54)【発明の名称】 スロットマシン

## (57)【要約】

【目的】 ゲームの変化を富ませ、ゲームの面白みを増進する。

【構成】 液晶前面表示器 4 0 が絵柄の前面で、賞出表示や賞出組合せの配列に沿ったライン表示等の所定の表示を表示することができ、液晶前面表示器 4 0 が賞出表示を表示すると、賞出の際の変化に富み、液晶前面表示器 4 0 が賞出組合せの各絵柄の配列に沿ったライン表示を表示すると、賞出組合せとなる配列を把握しやすいため、ゲームの面白みを増進することができ、さらに、ゲーム媒体が投入されない状態では、液晶前面表示器 4 0 にライン表示を表示していないで、ゲーム媒体が投入された際に、賞出組合せ設定手段 3 2 により設定された賞出組合せの各絵柄の配列に沿ったライン表示を液晶前面表示器 4 0 に表示するようにしたので、ラインが光って、ゲーム媒体を投入することによる興奮性を増し、遊技に対する射幸心をあおることができる。



20 a ~ 20 c : 液晶前面表示器  
24 : 絵柄  
35 a ~ 35 d : ライン表示  
36 : 特表示  
40 : 液晶前面表示器

## 【特許請求の範囲】

【請求項1】投入口へのゲーム媒体の投入とゲーム開始スイッチの操作により絵柄表示器の複数の絵柄を変化させ、所定の停止タイミングで各絵柄の変化を停止させるスロットマシンにおいて、

各絵柄の前面に配置された液晶前面表示器と、前記液晶前面表示器に所定の表示を表示させる前面表示制御手段と、

前記複数の絵柄表示器はそれぞれ前記絵柄を同時に複数表示する構成と、

前記投入口に投入された前記ゲーム媒体の真偽の識別部と、

各絵柄のうち直線状に配列される絵柄による複数の所定の組合せから、前記識別部により真正と識別された前記ゲーム媒体の個数に応じて、所定の賞出組合せを設定する賞出組合せ設定手段と、

変化を停止後の各絵柄の組合せが、前記賞出組合せ設定手段により設定された前記賞出組合せと一致するか否かを判断する賞出判断手段と、

前記賞出判断手段が前記賞出組合せと一致すると判断したとき、賞出を行う賞出手段とを有し、

前記前面表示制御手段は、前記ゲーム媒体が投入された際に、前記賞出組合せ設定手段により設定された前記賞出組合せの各絵柄の配列に沿ったライン表示を前記液晶前面表示器に表示し、かつ、前記ゲーム媒体が投入されない状態では、前記液晶前面表示器に前記ライン表示を表示しない構成を有することを特徴とするスロットマシン。

## 【発明の詳細な説明】

## 【0001】

【産業上の利用分野】本発明は、投入口へのゲーム媒体の投入とゲーム開始スイッチの操作により複数の絵柄表示器の絵柄を変化させ、所定の停止タイミングで各絵柄の変化を停止させるスロットマシンに関する。

## 【0002】

【従来の技術】従来のこの種のスロットマシンとして、例えば、実開昭54-130590号公報に示すものがある。すなわち、投入口にメダルやコイン等のゲーム媒体を投入した後、図柄を表示した3個のドラムを回転させ、停止スイッチのボタンを順次押してドラムの回転を停止し、停止後の各表示の組合せに応じて、所定数のゲーム媒体を賞出するようになっている。

【0003】この従来のスロットマシンでは、ゲーム媒体の投入枚数に応じて、賞出組合せとなる組合せの数が異なっており、賞出組合せは、例えば、ゲーム媒体を1個投入した場合には、3個のドラムの中段で横一列に同種の絵柄が揃う組合せであり、ゲーム媒体を2個投入した場合には、3個のドラムの上段、中段、下段のいずれかで横一列に同種の絵柄が揃う組合せであり、ゲーム媒体を3個投入した場合には、3個のドラムの上段、中

段、下段のいずれかで横一列に同種の絵柄が揃うか、あるいは斜め一列に絵柄が揃う組合せとなっている。これらの賞出組合せとなる上段、中段、下段、斜めの各配列を示すために、正面ガラスのドラム付近には、各配列に沿ったラインが固定的に描かれている。

## 【0004】

【発明が解決しようとする課題】しかしながら、従来のスロットマシンでは、賞出組合せが揃ったとき、ゲーム媒体の賞出が行われるほかには、変化がないため、ゲームの面白みに欠けるという問題点があった。

【0005】また、従来のスロットマシンでは、ゲーム媒体の投入枚数にかかわらず賞出組合せを示すラインは固定的であるため、賞出組合せとなる配列を把握しにくく、ゲームの面白みに欠け、また、前記ラインをゲーム開始前から単に液晶表示したのでは、変化に乏しく、この点からもゲームの面白みに欠けるという問題点があった。

【0006】本発明は、かかる問題点を解決すべく考えたもので、賞出表示や賞出組合せの配列に沿ったライン表示等の所定の表示を表示することができ、また、ゲーム媒体が投入された際に、全体数に応じてライン表示するようにして、変化に富み、ゲームの面白みが増進したスロットマシンを提供することを目的とする。

## 【0007】

【課題を解決するための手段】かかる目的を解決するため、本発明の要旨とするところは、投入口へのゲーム媒体の投入とゲーム開始スイッチの操作により絵柄表示器の複数の絵柄を変化させ、所定の停止タイミングで各絵柄の変化を停止させるスロットマシンにおいて、各絵柄の前面に配置された液晶前面表示器と、前記液晶前面表示器に所定の表示を表示させる前面表示制御手段と、前記複数の絵柄表示器はそれぞれ前記絵柄を同時に複数表示する構成と、前記投入口に投入された前記ゲーム媒体の真偽の識別部と、各絵柄のうち直線状に配列される絵柄による複数の所定の組合せから、前記識別部により真正と識別された前記ゲーム媒体の個数に応じて、所定の賞出組合せを設定する賞出組合せ設定手段と、変化を停止後の各絵柄の組合せが、前記賞出組合せ設定手段により設定された前記賞出組合せと一致するか否かを判断する賞出判断手段と、前記賞出判断手段が前記賞出組合せと一致すると判断したとき、賞出を行う賞出手段とを有し、前記前面表示制御手段は、前記ゲーム媒体が投入された際に、前記賞出組合せ設定手段により設定された前記賞出組合せの各絵柄の配列に沿ったライン表示を前記液晶前面表示器に表示し、かつ、前記ゲーム媒体が投入されない状態では、前記液晶前面表示器に前記ライン表示を表示しない構成を有することを特徴とするスロットマシンに存する。

## 【0008】

【作用】絵柄表示器の絵柄の前面で、液晶前面表示器

は、前面表示制御手段により、部分的に遮光状態と透過状態とで変化して所定の表示を行う。

【0009】表示制御手段が液晶前面表示器に賞出表示を表示させる場合や、言または振動発生手段を有する場合には、賞出の際の変化に富む。

【0010】また、表示制御手段が賞出組合せの各絵柄の配列に沿ったライン表示を表示させる場合には、賞出組合せとなる配列を把握しやすい。

【0011】また、ゲーム媒体が投入されない状態では、液晶前面表示器にライン表示を表示していないで、ゲーム媒体が投入された際に、賞出組合せ設定手段により設定された賞出組合せの各絵柄の配列に沿ったライン表示を液晶前面表示器に表示する。それにより、ラインが光り、ゲーム媒体を投入することによる興奮性を増すことができる。

【0012】

【実施例】以下、図面に基づき本発明の一実施例について説明する。図1～図4は、本発明の一実施例を示している。図2に示すように、スロットマシン10は、箱体11の正面11aに縦長の3個の液晶絵柄表示器20a、20b、20cを横方向に並設している。液晶絵柄表示器20a、20b、20cは、表示される絵柄24をバックライトにより明るく輝いて見えるようにするものである。

【0013】液晶絵柄表示器20a、20b、20cの前面の正面11aには、液晶前面表示器40が設けられている。液晶前面表示器40は、各絵柄24の前面に配置され、液晶ガラスを用い、通常は透光状態であるが、通電により部分的に遮光状態に変化して表示を行うようになっている。液晶絵柄表示器20a、20b、20cの下方には、それぞれに対応して3個の停止操作スイッチ25a、25b、25cが設けられている。停止操作スイッチ25a、25b、25cは、液晶絵柄表示器20a、20b、20cの絵柄24の変化の停止タイミングを選択するための停止ボタンである。また、正面11aには、ゲーム媒体として用いられるメダルの投入口12と、ゲーム開始スイッチ13とが形成されている。スロットマシン10の内部には、投入口12に投入されたメダルの高偽を識別する識別部14が設けられている。

【0014】また、スロットマシン10の内部には、図3に示す制御装置30が設けられている。制御装置30は、絵柄表示制御手段31と、賞出組合せ設定手段32と、賞出判断手段33と、前面表示制御手段34とが設けられている。絵柄表示制御手段31は、識別部14が投入されたメダルの真正を識別したとき、ゲーム開始スイッチ14の操作に応じて、3個の液晶絵柄表示器20a、20b、20cのそれぞれに、縦方向に絵や記号、数字、文字等の複数種類の絵柄24を上または下方に滑るように変化させて表示させるようになっている。また、絵柄表示制御手段31は、所定の停止タイミング、

すなわち、3個の停止操作スイッチ25a、25b、25cの操作により選択された停止タイミングで、3個の液晶絵柄表示器20a、20b、20cのうち対応する液晶絵柄表示器の絵柄24の変化を停止させるようになっている。

【0015】賞出組合せ設定手段32は、各絵柄24のうち直線上に配列される絵柄24による複数の所定の組合せから、識別部14により真正と識別されたメダルの個数に応じて、賞出組合せを設定するようになっている。賞出判断手段33は、液晶絵柄表示器20a、20b、20cの、変化を停止後の各絵柄24の組合せが所定の賞出組合せ、すなわち、賞出組合せ設定手段32により設定された賞出組合せと一致するか否かを判断するようになっている。

【0016】前面表示制御手段34は、液晶前面表示器40に、賞出組合せ設定手段32により設定された賞出組合せの各絵柄24の配列に沿ったライン表示35a～35eを、各絵柄24の前面に表示させるようになっている。また、前面表示制御手段34は、賞出判断手段33が賞出組合せと一致すると判断したとき、液晶前面表示器40に所定の賞出表示を表示させるようになっている。所定の賞出表示としては、賞出判断手段33が賞出組合せと一致すると判断した各絵柄24の配列に沿ったライン表示35a～35eの点滅表示や、液晶前面表示器40の、賞出判断手段33が賞出組合せと判断した各絵柄24に対応する位置を囲んで点滅する枠表示36等が表示されるようになっている。

【0017】図4(A)に示すメダルを投入しない状態に対し、賞出組合せとそれに対応するライン表示35a～35eは、例えば、識別部14により識別されたメダルの個数が1個のときには、図4(B)にライン表示35aで示すように、3個の液晶絵柄表示器20a、20b、20cによって、それぞれの中段で3個の賞出絵柄24、例えば「7」が真横に並ぶ組合せである。また、メダルの個数が2個のときには、図4(C)にライン表示35a～35eで示すように、3個の液晶絵柄表示器20a、20b、20cによって、それぞれの上段、中段、下段のいずれかで3個の賞出絵柄24が真横に並ぶ組合せである。また、メダルの個数が3個のときには、図4(D)にライン表示35a～35eで示すように、3個の液晶絵柄表示器20a、20b、20cによって、それぞれの上段、中段、下段のいずれかで3個の賞出絵柄24が真横に並ぶ組合せか、左側の液晶絵柄表示器20aの下段と中央の液晶絵柄表示器20bの中段と右側の液晶絵柄表示器20cの上段とで3個の同種の絵柄24が斜めに並ぶ組合せか、あるいは、左側の液晶絵柄表示器20aの上段と中央の液晶絵柄表示器20bの中段と右側の液晶絵柄表示器20cの下段とで3個の賞出絵柄24が斜めに並ぶ組合せのいずれかの組合せである。

【0018】また、箱体11の内部には、音発生手段37が設けられている。音発生手段37は、賞出判断手段33の判断に応じて、賞出があったことを知らせる音を発生させるようになっている。また、箱体11には、賞出手段38が設けられている。賞出手段38は、賞出判断手段33が賞出組合せと一致すると判断したとき、箱体11の下部に設けられた賞出皿39内に賞として複数のメダルを排出するものである。

【0019】制御装置30は、絵柄表示制御手段31、賞出組合せ設定手段32、賞出判断手段33および前面表示制御手段34の機能を、プログラム可能なマイクロコンピュータ、または、これと同等のものを適宜に用いて実現することができ、例えば、マイクロコンピュータで実現するとすれば、中央処理装置、リードオンリーメモリ、ランダムアクセスメモリ、インターフェース等を揃えて構成する。

【0020】次に、作用について説明する。ゲームを行う場合、まず、投入口12に、設定しようとする賞出組合せに応じた個数のメダルを投入する。すなわち、図4の(B)に示すように1つの賞出組合せを設定する場合には、1個のメダルを投入し、図4の(C)に示すように3つの賞出組合せを設定する場合には、2個のメダルを投入し、図4の(D)に示すように5つの賞出組合せを設定する場合には、3個のメダルを投入する。

【0021】投入したメダルが識別部14により真正と識別されると、識別された個数に応じて賞出組合せ設定手段32により賞出組合せが設定されたとともに、前面表示制御手段34により、投入した個数に応じて、図1(A)に示すように、液晶前面表示器40にライン表示35a~35eが表示される。液晶前面表示器40は、通常は透光状態であって、正面側には液晶絵柄表示器20a、20b、20cの各絵柄24を見ているが、前面表示制御手段34により表示が行われる場合には、各絵柄24の前面で、表示が行われる部分が通電により透光状態に変化して所定の表示が行われる。このライン表示35a~35eは、図4の(B)、(C)、(D)で示す太線に対応して表示される。ライン表示35a~35eにより、賞出組合せとなる配列を把握しやすくなるため、ゲームの面白みが増進するものである。なお、メダルを投入しない状態では、液晶前面表示器40にライン表示35a~35eは表示されていない。次に、ゲーム開始スイッチ13を押して操作すると、絵柄表示制御手段31により、3個の液晶絵柄表示器20a、20b、20cに表示された絵柄24が、複数種類の絵柄で次々と上から下へ、または下から上へと滑るように変化して表示される。

【0022】このとき、停止操作スイッチ25a、25b、25cを押すと、その操作に応じた停止タイミングで、対応する液晶絵柄表示器20a、20b、20cの絵柄24の変化が停止する。停止した絵柄24が賞出組

合せのいずれか、または、すべてと一致するとき、すなわち、液晶前面表示器40に表示されるライン表示35a~35eのいずれかと重なって賞出絵柄24が表示されたとき、賞出判断手段33により、賞出手段38は賞出皿39へメダルを賞出する。

【0023】賞出と同時に、音発生手段37が賞出したことを知らせる音を発生し、また、前面表示制御手段34により、液晶前面表示器40には、賞出表示が表示される。このように、賞出の際の変化に富むため、ゲームの面白みが増進するものである。賞出表示としては、液晶前面表示器40には、賞出組合せと一致した各絵柄24の配列に沿ったライン表示35a~35eの点滅表示や、各絵柄24に対応する位置を囲んで点滅する枠表示36とが表示される。またはこれらを適宜に組み合わせてもよい。これにより、どの配列で賞出組合せが表示されたかを知らせるとともに、射幸心をあおることができ、停止した絵柄24が賞出組合せと一致しないときには、賞出や、賞出表示、音の発生のいずれも行われない。

【0024】液晶絵柄表示器20a、20b、20cは、ドラム3を用いる場合に比べて、絵柄24の個数と寸法を変えずに興行を薄くすることができ、このため、スロットマシン10自体の興行を薄くすることができ、なお、3個の液晶絵柄表示器を有するものについて説明したが、3個に限るのではなく、2個以上のいかなる個数であってもよい。

【0025】また、本実施例では、絵柄表示器として、液晶ガラスにより表示を行う液晶絵柄表示器を用いているが、その代わりに、通常の、周囲に絵柄を付して回転するドラムにより表示を行うものを用いてもよい。また、停止タイミングは、停止操作スイッチの操作に応じて選択されるほか、絵柄の表示の変化後、一定時間の経過により自動的に選択されるものであってもよい。

【0026】また、メダルを投入しない状態で、液晶前面表示器にライン表示を表示しない代わり、表示しうるすべてのライン表示を表示したり、あるいは、前回のゲームで表示したライン表示をそのまま残して表示したりしてもよい。また、音発生手段が発する音は、言葉や形成する声であってもよい。また、音発生手段は、賞出が行われたときの音か、賞出が行われなかったときに、そのことを知らせる音を発生するものであってもよい。また、音発生手段の代わり、または、音発生手段とともに、振動発生手段を設けることにより、賞出が行われた場合の迫力を増すようにしてもよい。

【0027】

【発明の効果】本発明に係るスロットマシンによれば、液晶前面表示器が絵柄の前面で、賞出表示や賞出組合せの配列に沿ったライン表示等の所定の表示を表示することができ、液晶前面表示器が賞出表示を表示すると、賞出の際の変化に富み、液晶前面表示器が賞出組合せの各

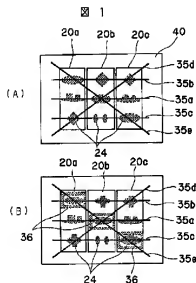
絵柄の配列に沿ったライン表示を表示すると、賞出組合せとなる配列を把握しやすいため、ゲームの面白みが増進するものである。さらに、ゲーム媒体が投入されない状態では、液晶前面表示器にライン表示を表示していないで、ゲーム媒体が投入された際に、賞出組合せ設定手段により設定された賞出組合せの各絵柄の配列に沿ったライン表示を液晶前面表示器に表示するようにしたので、ラインが光って、ゲーム媒体を投入することによる興奮性を増し、遊技に対する射幸心をあおることができる。

【図面の簡単な説明】

【図1】本発明の一実施例のスロットマシンの、賞出表示を表示した液晶絵柄表示器の概略正面図である。

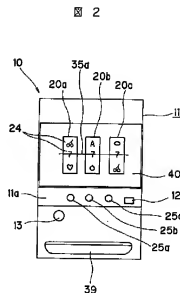
【図2】スロットマシンの正面図である。

【図1】



20a~20c: 液晶絵柄表示器  
24: 絵柄  
35a~35d: ライン表示  
36: 物表示  
40: 液晶前面表示器

【図2】



【図3】スロットマシンの機能を示すブロック図である。

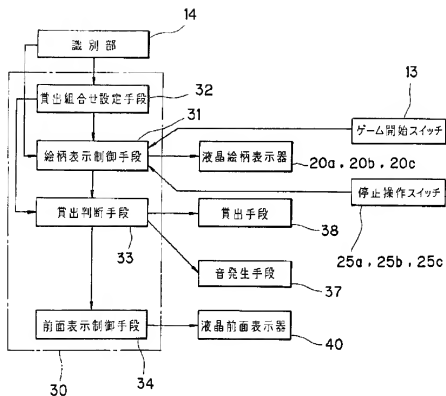
【図4】賞出組合せを示す液晶絵柄表示器の概略正面図である。

【符号の説明】

10…スロットマシン、11…箱体、12…投入口、13…ゲーム開始スイッチ、14…識別部、20a、20b、20c…液晶絵柄表示器、24…絵柄、25a、25b、25c…停止操作スイッチ、30…制御装置、31…絵柄表示制御手段、32…賞出組合せ設定手段、33…賞出判断手段、34…前面表示制御手段、35a~35e…ライン表示、36…枠表示、37…音発生手段、38…賞出手段、39…賞出皿、40…液晶前面表示器。

【図3】

図 3



【図4】

図 4

